

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/523,273  
Source: PUT/10  
Date Processed by STIC: 2/22/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 02/22/2005

PATENT APPLICATION: US/10/523,273

TIME: 14:06:15

Input Set : A:\66339-03 sequence listing.txt

Output Set: N:\CRF4\02222005\J523273.raw

3 <110> APPLICANT: THE UNITED STATES OF AMERICA AS REPRESENTED BY THE  
 4 SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES  
 5 Klinman, Dennis M.  
 6 Zeuner, Rainald  
 7 Verthelyi, Daniela  
 8 Gursel, Ihsan  
 9 Gursel, Mayda  
 11 <120> TITLE OF INVENTION: METHOD FOR TREATING INFLAMMATORY ARTHROPATHIES WITH  
 SUPPRESSORS  
 12 OF CPG OLIGONUCLEOTIDES  
 14 <130> FILE REFERENCE: 4239-66339-03  
 C--> 16 <140> CURRENT APPLICATION NUMBER: US/10/523,273  
 C--> 16 <141> CURRENT FILING DATE: 2005-01-31  
 16 <150> PRIOR APPLICATION NUMBER: PCT/US2003/024205  
 17 <151> PRIOR FILING DATE: 2003-07-31  
 19 <150> PRIOR APPLICATION NUMBER: US 60/401,631  
 20 <151> PRIOR FILING DATE: 2002-08-06  
 22 <150> PRIOR APPLICATION NUMBER: US 60/400,826  
 23 <151> PRIOR FILING DATE: 2002-08-01  
 25 <160> NUMBER OF SEQ ID NOS: 112  
 27 <170> SOFTWARE: PatentIn version 3.3  
 29 <210> SEQ ID NO: 1  
 30 <211> LENGTH: 16  
 31 <212> TYPE: DNA  
 32 <213> ORGANISM: Artificial Sequence  
 34 <220> FEATURE:  
 35 <223> OTHER INFORMATION: Suppressive oligonucleotide  
 37 <400> SEQUENCE: 1  
 38 cctcaagctt gagggg 16  
 41 <210> SEQ ID NO: 2  
 42 <211> LENGTH: 24  
 43 <212> TYPE: DNA  
 44 <213> ORGANISM: Artificial Sequence  
 46 <220> FEATURE:  
 47 <223> OTHER INFORMATION: Suppressive oligonucleotide  
 49 <400> SEQUENCE: 2 24  
 50 ttagggtag ggtaggggtt aggg  
 53 <210> SEQ ID NO: 3  
 54 <211> LENGTH: 18  
 55 <212> TYPE: DNA  
 56 <213> ORGANISM: Artificial Sequence  
 58 <220> FEATURE:  
 59 <223> OTHER INFORMATION: Suppressive oligonucleotide  
 61 <400> SEQUENCE: 3

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62 ttagggttag ggtaggg                                     18
65 <210> SEQ ID NO: 4
66 <211> LENGTH: 12
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Suppressive oligonucleotide
73 <400> SEQUENCE: 4                                     12
74 ttagggttag gg
77 <210> SEQ ID NO: 5
78 <211> LENGTH: 24
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Suppressive oligonucleotide
85 <400> SEQUENCE: 5                                     24
86 tgggcggttg ggcggttggg cggt
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 16
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Suppressive oligonucleotide
97 <400> SEQUENCE: 6                                     16
98 tgggcggttg ggcggt
101 <210> SEQ ID NO: 7
102 <211> LENGTH: 16
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Suppressive oligonucleotide
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110 tcaaccttca ttaggg
113 <210> SEQ ID NO: 8
114 <211> LENGTH: 22
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Suppressive oligonucleotide
121 <400> SEQUENCE: 8                                     22
122 ttagggttag ggtcaacctt ca
125 <210> SEQ ID NO: 9
126 <211> LENGTH: 22
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Suppressive oligonucleotide
133 <400> SEQUENCE: 9                                     22
134 tcaaccttca ttagggttag gg

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137 <210> SEQ ID NO: 10
138 <211> LENGTH: 22
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Suppressive oligonucleotide
145 <400> SEQUENCE: 10
146 gggtagggt tatcaacctt ca 22
149 <210> SEQ ID NO: 11
150 <211> LENGTH: 22
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Suppressive oligonucleotide
157 <400> SEQUENCE: 11
158 tcaaccttca gggtagggt ta 22
161 <210> SEQ ID NO: 12
162 <211> LENGTH: 22
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Suppressive oligonucleotide
169 <400> SEQUENCE: 12
170 gggtagggtgt gtattaccat ta 22
173 <210> SEQ ID NO: 13
174 <211> LENGTH: 22
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Suppressive oligonucleotide
181 <400> SEQUENCE: 13
182 attaccatta gggtagggtgt gt 22
185 <210> SEQ ID NO: 14
186 <211> LENGTH: 18
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Suppressive oligonucleotide
193 <400> SEQUENCE: 14
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198 <211> LENGTH: 18
199 <212> TYPE: DNA
200 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
203 <223> OTHER INFORMATION: Suppressive oligonucleotide
205 <400> SEQUENCE: 15
206 tcaagcttca tgggcggt 18
209 <210> SEQ ID NO: 16

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210 <211> LENGTH: 22
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: Suppressive oligonucleotide
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218 ggggtgggtgg gtagacgtta cc 22
221 <210> SEQ ID NO: 17
222 <211> LENGTH: 16
223 <212> TYPE: DNA
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Suppressive oligonucleotide
229 <400> SEQUENCE: 17
230 ggggggtcaa gcttca 16
233 <210> SEQ ID NO: 18
234 <211> LENGTH: 16
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Suppressive oligonucleotide
241 <400> SEQUENCE: 18
242 tcaagcttca gggggg 16
245 <210> SEQ ID NO: 19
246 <211> LENGTH: 16
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Suppressive oligonucleotide
253 <400> SEQUENCE: 19
254 ggggggtcaa cgttca 16
257 <210> SEQ ID NO: 20
258 <211> LENGTH: 20
259 <212> TYPE: DNA
260 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: Suppressive oligonucleotide
265 <400> SEQUENCE: 20
266 gagcaagctg gaccttccat 20
269 <210> SEQ ID NO: 21
270 <211> LENGTH: 21
271 <212> TYPE: DNA
272 <213> ORGANISM: Artificial Sequence
274 <220> FEATURE:
275 <223> OTHER INFORMATION: Suppressive oligonucleotide
277 <400> SEQUENCE: 21
278 gagcaagctg gtagacgtta g 21
281 <210> SEQ ID NO: 22
282 <211> LENGTH: 20

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Input Set : A:\66339-03 sequence listing.txt

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283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: Suppressive oligonucleotide
289 <400> SEQUENCE: 22
290 gggcaagctg gacctggggg 20
293 <210> SEQ ID NO: 23
294 <211> LENGTH: 20
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: Suppressive oligonucleotide
301 <400> SEQUENCE: 23
302 ggggaagctg gacctggggg 20
305 <210> SEQ ID NO: 24
306 <211> LENGTH: 20
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial Sequence
310 <220> FEATURE:
311 <223> OTHER INFORMATION: Suppressive oligonucleotide
313 <400> SEQUENCE: 24
314 gggcaagctg gaccttcggg 20
317 <210> SEQ ID NO: 25
318 <211> LENGTH: 22
319 <212> TYPE: DNA
320 <213> ORGANISM: Artificial Sequence
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323 <223> OTHER INFORMATION: Suppressive oligonucleotide
325 <400> SEQUENCE: 25
326 ggcaagctgg accttcgggg gg 22
329 <210> SEQ ID NO: 26
330 <211> LENGTH: 10
331 <212> TYPE: DNA
332 <213> ORGANISM: Artificial Sequence
334 <220> FEATURE:
335 <223> OTHER INFORMATION: Immunostimulatory oligonucleotide
337 <400> SEQUENCE: 26
338 tcaacgttga 10
341 <210> SEQ ID NO: 27
342 <211> LENGTH: 15
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: Immunostimulatory oligonucleotide
349 <400> SEQUENCE: 27
350 gctagacgtt agcgt 15
353 <210> SEQ ID NO: 28
354 <211> LENGTH: 10
355 <212> TYPE: DNA

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/10/523,273**

DATE: 02/22/2005  
TIME: 14:06:16

Input Set : A:\66339-03 sequence listing.txt  
Output Set: N:\CRF4\02222005\J523273.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:36; N Pos. 1,2,3,10,11,12  
Seq#:37; N Pos. 1,2,3,10,11,12,13  
Seq#:38; N Pos. 1,2,3,10,11,12,13,14  
Seq#:39; N Pos. 1,2,3,10,11,12,13,14,15  
Seq#:40; N Pos. 1,2,3,10,11,12,13,14,15,16  
Seq#:41; N Pos. 1,2,3,10,11,12,13,14,15,16,17  
Seq#:42; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18  
Seq#:43; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19  
Seq#:44; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20  
Seq#:45; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21  
Seq#:46; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:47; N Pos. 1,2,3,10,11,12  
Seq#:48; N Pos. 1,2,3,10,11,12,13  
Seq#:49; N Pos. 1,2,3,10,11,12,13,14  
Seq#:50; N Pos. 1,2,3,10,11,12,13,14,15  
Seq#:51; N Pos. 1,2,3,10,11,12,13,14,15,16  
Seq#:52; N Pos. 1,2,3,10,11,12,13,14,15,16,17  
Seq#:53; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18  
Seq#:54; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19  
Seq#:55; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20  
Seq#:56; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21  
Seq#:57; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:58; N Pos. 1,2,3,10,11,12  
Seq#:59; N Pos. 1,2,3,10,11,12,13  
Seq#:60; N Pos. 1,2,3,10,11,12,13,14  
Seq#:61; N Pos. 1,2,3,10,11,12,13,14,15  
Seq#:62; N Pos. 1,2,3,10,11,12,13,14,15,16  
Seq#:63; N Pos. 1,2,3,10,11,12,13,14,15,16,17  
Seq#:64; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18  
Seq#:65; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19  
Seq#:66; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20  
Seq#:67; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21  
Seq#:68; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21,22  
Seq#:69; N Pos. 1,2,3,10,11,12  
Seq#:70; N Pos. 1,2,3,10,11,12,13  
Seq#:71; N Pos. 1,2,3,10,11,12,13,14  
Seq#:72; N Pos. 1,2,3,10,11,12,13,14,15  
Seq#:73; N Pos. 1,2,3,10,11,12,13,14,15,16  
Seq#:74; N Pos. 1,2,3,10,11,12,13,14,15,16,17  
Seq#:75; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18  
Seq#:76; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19  
Seq#:77; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20  
Seq#:78; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21  
Seq#:79; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18,19,20,21,22

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Input Set : A:\66339-03 sequence listing.txt  
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Seq#:80; N Pos. 1,2,3,10,11,12  
Seq#:81; N Pos. 1,2,3,10,11,12,13  
Seq#:82; N Pos. 1,2,3,10,11,12,13,14  
Seq#:83; N Pos. 1,2,3,10,11,12,13,14,15  
Seq#:84; N Pos. 1,2,3,10,11,12,13,14,15,16  
Seq#:85; N Pos. 1,2,3,10,11,12,13,14,15,16,17  
Seq#:86; N Pos. 1,2,3,10,11,12,13,14,15,16,17,18



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Input Set : A:\66339-03 sequence listing.txt

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L:16 M:270 C: Current Application Number differs, Replaced Current Application No  
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0  
L:492 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
L:515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
L:538 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0  
L:561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0  
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0  
L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0  
L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0  
L:653 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0  
L:676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0  
L:699 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0  
L:722 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0  
L:768 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
L:791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:0  
L:814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0  
L:837 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:0  
L:860 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
L:883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0  
L:906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55 after pos.:0  
L:929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0  
L:952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0  
L:975 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:0  
L:998 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:0  
L:1021 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0  
L:1044 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:0  
L:1067 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62 after pos.:0  
L:1090 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0  
L:1113 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:0  
L:1136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65 after pos.:0  
L:1159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0  
L:1182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67 after pos.:0  
L:1205 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68 after pos.:0  
L:1228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0  
L:1251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:0  
L:1274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:0  
L:1297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0  
L:1320 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73 after pos.:0  
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L:1366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:0  
L:1389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:76 after pos.:0  
L:1412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77 after pos.:0  
L:1435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:0  
L:1458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79 after pos.:0  
L:1481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80 after pos.:0  
L:1504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0

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Input Set : A:\66339-03 sequence listing.txt

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L:1527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82 after pos.:0  
L:1550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:0  
L:1573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0  
L:1596 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:85 after pos.:0